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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,403	02/25/2002	David J. Luneau	10200-005001	3772

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EXAMINER	
TAYLOR, BARRY W	

ART UNIT	PAPER NUMBER
2643	5

DATE MAILED: 03/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/082,403	LUNEAU, DAVID J.	
	Examiner	Art Unit	
	Barry W Taylor	2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-31 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-31 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date No. 4 (10/16/02).
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-8 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over McLaughlin et al (6,078,646 hereinafter McLaughlin) in view of Zitting et al (6,584,148 hereinafter Zitting).

Regarding claims 1 and 16. McLaughlin teaches telephone line equipment comprising:

a data detector configured for connection to a telephone line wherein the data detector is configured to detect data provided on the telephone line and to provide signals representing the detected data at an output (see data detector 30 figures 1 and 2 wherein caller id signal data is detected and provided to microcontroller (90 figure 2); and

a processor connected to the output of the data detector and the input of the telephone line terminal wherein the processor monitors the signals provided at the output of the data detector for a Loop Test Message and provides a termination signal to the input of the telephone line terminator in response to the receipt of the Loop Test Message (see figure 3A wherein received caller id used to determine test to be preformed by microcontroller, col.3 line 5 – col. 4 line 42).

McLaughlin does not use the term "Loop Test Message".

Zitting teaches system and method for testing subscriber lines by using Remote Test Interface (see 36 figures 1 and 4). Zitting teaches the RTI detects start message sent from loop management device located at central office (see last paragraph column 8). Zitting also discloses the RTI recognizes other commands such as "open loop" and "short loop" commands (column 9) wherein "open loop" commands RTI to disconnect customer premises equipment via a terminal control device forming "open circuit" (182 figure 4, column 9). The "short loop" command is similar to "open loop" except processor controls termination device to form a "short circuit". Once open or short circuit formed, the central office may perform tests of the open or short circuit. Zitting further shows "generate signal" command may be sent by central office to RTI indicating that signal is to be generated by RTI enabling for insertion loss of cable connecting central office and CPE (column 10). Zitting teaches using "start test" signal sent from central office (see step 212 figure 5, columns 10-11).

Therefore, it would have been obvious for any one of ordinary skill in the art at the time the invention was made to modify the caller id signal as taught by McLaughlin to include "start test" message as taught by Zitting for the benefit of using start test signals that do not interfere with modem or other voice-band communications as taught by Zitting (col. 8 lines 59-63).

Regarding claim 2. McLaughlin teaches using caller id activated test device (see Title and abstract).

Regarding claim 3. McLaughlin teaches standard caller id (col. 2 lines 54-60).

Regarding claim 4. McLaughlin teaches disconnecting customer telephone (col. 3 lines 43-53) obviously requiring terminal resistor.

Regarding claim 5. McLaughlin teaches microcontroller used (see 90 figure 2).

Regarding claims 6-7. McLaughlin teaches processor monitors duration of the terminal signal (see figure 3A wherein after "off-hook" condition a software timer is started enabling for the selected test to be performed).

Regarding claim 8. McLaughlin does not use the term "Stop Test Message".

Zitting teaches system and method for testing subscriber lines by using Remote Test Interface (see 36 figures 1 and 4). Zitting teaches the RTI detects start message sent from loop management device located at central office (see last paragraph column 8). Zitting also discloses the RTI recognizes other commands such as "open loop" and "short loop" commands (column 9) wherein "open loop" commands RTI to disconnect customer premises equipment via a terminal control device forming "open circuit" (182 figure 4, column 9). The "short loop" command is similar to "open loop" except processor controls termination device to form a "short circuit". Once open or short circuit formed, the central office may perform tests of the open or short circuit. Zitting further shows "generate signal" command may be sent by central office to RTI indicating that signal is to be generated by RTI enabling for insertion loss of cable connecting central office and CPE (column 10). Zitting teaches using "start test" signal sent from central office (see step 212 figure 5, columns 10-11).

Therefore, it would have been obvious for any one of ordinary skill in the art at the time the invention was made to modify the caller id signal as taught by McLaughlin to include "start test" message as taught by Zitting for the benefit of using start test signals that do not interfere with modem or other voice-band communications as taught by Zitting (col. 8 lines 59-63).

Regarding claim 17. McLaughlin teaches loop back testing activated by using caller id (Title, abstract).

Regarding claim 18. McLaughlin teaches plurality of frequencies used (col. 3 lines 54-61).

Regarding claim 19. McLaughlin teaches line loss (col. 2 lines 20-29, col. 3 line 62 – col. 4 line 6).

2. Claims 9-15 and 20-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over McLaughlin et al (6,078,646 hereinafter McLaughlin) in view of Zitting et al (6,584,148 hereinafter Zitting) further in view of Bleile et al (6,295,348 hereinafter Bleile).

Regarding claims 9-15. McLaughlin in view of Zitting do not explicitly show using the term "voltage detector". However, McLaughlin teaches determine if customer telephone goes off-hook (col. 4 line 32) which obviously requires voltage detect circuitry.

Bleile teaches method of arbitrating type II/type III CPE's during SCWID (Title, abstract, col. 5 line 36 – col. 6 line 34). Bleile using extension-in-use detector (see 64 figure 2) and off-hook-detector (see 68 figure 2) used to determine type of CPE

connected to subscriber loop and thereby notifying telephony switch of the detected CPE type.

Therefore, it would have been obvious for any one of ordinary skill in the art at the time of invention to modify the invention as taught by McLaughlin in view of Zitting to use extension-in-use detector as taught by Bleile for the benefit of notifying telephony switch when extension telephone of particular type goes off-hook as taught by Bleile.

Regarding claims 21-25 and 27-31. McLaughlin teaches telephony apparatus located at CPE (col. 1 line 55 – col. 2 line 29). Zitting also shows the remote test interface (see 36 figure 1) at CPE. Bleile also shows subscriber line having variety of telephony devices connected thereto (see figure 1).

Regarding claims 20 and 26. McLaughlin in view of Zitting do not explicitly show determine if extension telephone devices are off-hook. However, McLaughlin teaches determine if customer telephone goes off-hook (col. 4 line 32).

Bleile teaches method of arbitrating type II/type III CPE's during SCWID (Title, abstract, col. 5 line 36 – col. 6 line 34). Bleile using extension-in-use detector (see 64 figure 2) and off-hook-detector (see 68 figure 2) used to determine type of CPE connected to subscriber loop and thereby notifying telephony switch of the detected CPE type.

Therefore, it would have been obvious for any one of ordinary skill in the art at the time of invention to modify the invention as taught by McLaughlin in view of Zitting to use extension-in-use detector as taught by Bleile for the benefit of notifying telephony switch when extension telephone of particular type goes off-hook as taught by Bleile.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry W. Taylor whose telephone number is (703) 305-4811. The examiner can normally be reached on Monday-Friday from 6:30am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on (703) 305-4708. The fax phone number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Technology Center 2600 customer service Office whose telephone number is (703) 306-0377.

CURTIS KUNTZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600